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     (FILE 'HOME' ENTERED AT 16:25:34 ON 28 DEC 2000)

     FILE 'CAPLUS, USPATFULL' ENTERED AT 16:25:46 ON 28 DEC 2000
L1          319 S (FORM# OR FORMING) (1W) (SULFONIC ACID)
L2        63903 S PHOTORESIST
L3           20 S L1 AND L2
L4           77 S (DECOMPOSE# OR DECOMPOSING) (5A) (SULFONIC ACID)
L5           12 S L2 AND L4
L6        19494 S (SULFONIC ACID)/AB
L7        19937 S PHOTORESIST/AB
L8          253 S L6 AND L7
```

( ) Udeland sbur

AH 1-3 Goodall

9 - But Acid + ethylacetal.

10, 11 $R_{13}-R_{16}$ = Acid cleav + Butyl sym + H.

12- Basic compd.

obj 1&

EAST Browser - L59: (173) (44 AND (56... | US 6017677 A | Tag: S | Doc: 152/173 | Format : KWIC

File Edit View Tools Window Help

DOCUMENT-IDENTIFIER: US 6017677 A
TITLE: Planographic printing plate

ABPL:
The present invention provide a planographic printing plate comprising a substrate having thereon a recording layer which comprises at least one of a polymer compound carrying on a side chain a functional group which generates sulfonic acid under influence of an acid, base or heating; and a photo acid-generating agent or acid-generating agent; thermal base-generating agent; or an infrared ray absorbing agent, and by this structure, a high sensitive positive type planographic printing plate which can be developed with water or requires no developing is provided.

CLPR:
1. A planographic printing plate comprising a substrate having thereon a recording layer containing a photo acid-generating agent and a polymer compound carrying on a side chain a functional group which generates sulfonic acid in the presence of an acid selected from a group consisting of the following formulae (1) and (2):

CLPR:
2. A planographic printing plate comprising a substrate having thereon a recording layer containing a thermal base-generating agent and carrying on a side chain a functional group which generates sulfonic acid in the presence of a base selected from a group consisting of the following formulae (1) to (3):

CLPR:
4. A planographic printing plate comprising a substrate having thereon a

Details Text Image KWIC

United States Patent [19]
Maemoto et al.

[11] Patent Number: 6,017,677
[45] Date of Patent: Jan. 25, 2000

[54] PLANOGRAPHIC PRINTING PLATE

FOREIGN PATENT DOCUMENTS

OTHER PUBLICATIONS

[57] ABSTRACT

References Cited

U.S. PATENT DOCUMENTS

9 Claims, No Drawings

Details Text Image Full

EAST Browser - L59: (173) (44 AND (56... | US 6017677 A | Tag: S | Doc: 152/173 | "Full" 1/28 (Total images 28)

File Edit View Tools Window Help

Courier New 10

DOCUMENT-IDENTIFIER: US 6017677 A
TITLE: Planographic printing plate

ABPL:
The present invention provide a planographic printing plate comprising a
substrate having thereon a recording layer which comprises at least one of a
polymer compound carrying on a side chain a functional group which generates
sulfonic acid under influence of an acid, base or heating; and a photo
acid-generating agent or acid-generating agent;
thermal base-generating agent;
or an infrared ray absorbing agent, and by this structure, a high sensitive
positive type planographic printing plate which can be developed with water or
requires no developing is provided.

CLPR:
1. A planographic printing plate comprising a substrate having thereon a
recording layer containing a photo acid-generating agent and a polymer compound
carrying on a side chain a functional group which generates sulfonic acid in
the presence of an acid selected from a group consisting of the following
formulae (1) and (2):

CLPR:
2. A planographic printing plate comprising a substrate having thereon a
recording layer containing a thermal base-generating agent and carrying on a
side chain a functional group which generates sulfonic acid in the presence of
a base selected from a group consisting of the following formulae (1) to (3):

CLPR:
4. A planographic printing plate comprising a substrate having thereon a

Details Text Image KWIC

...: Fuji Photo Film Co., Ltd.,
Minami-Ashigara, Japan

...o.: 09/012,596

Jan. 23, 1998

...reign Application Priority Data

[JP] Japan 9-010755
[JP] Japan 9-026877
[JP] Japan 9-026878
[JP] Japan 9-036665

..... G03C 1/492
..... 430/270.1; 430/302; 101/467
...f Search 430/270.1, 302; 101/456, 467

References Cited

U.S. PATENT DOCUMENTS

9/1989 Shirai et al. 430/270
4/1993 Acai et al. 430/270
3/1998 Kawamura et al. 430/176

Patent Abstracts of Japan, vol. 009, ... 20, 1985 and JP 60 132760 A (A... KK), Jul. 15, 1985 "abstract".

Primary Examiner—Janet Baxter
Assistant Examiner—Rosemary Ash
Attorney, Agent, or Firm—Burns ... Mathis, LLP

[57] ABSTRACT

The present invention provide a pla... comprising a substrate having the... which comprises at least one of ... carrying on a side chain a functional ... sulfonic acid under influence of an a... a photo acid-generating agent or ... thermal base-generating agent; or a... agent, and by this structure, a high ... planographic printing plate which ... water or requires no developing is ...

9 Claims, No Dra...

Details Text Image Full

EAST Browser - L59: (173) (44 AND (56... | US 6007964 A | Tag: S | Doc: 149/173 | Format : KWIC

File Edit View Tools Window Help

Courier New 10

DOCUMENT-IDENTIFIER: US 6007964 A
TITLE: Planographic original plate

ABPL:
In the general formula (2), W.sup.1 represents a group which is decomposed by
an acid and selected from an ester group, a ketal group, a thioketal group, an
acetal group and a tertiary alcohol group. L represents a polyvalent linking
group comprising a non-metallic atom, which is necessary for linking the
structural unit which is represented by the general formula (2) to a polymer
skeleton, and whose decomposition accompanies the decomposition of W.sup.1,
which is decomposed by an acid, to generate sulfonic acid .

CLPV:
wherein, in the general formula (2), W.sup.1 represents a group which is
decomposed by an acid and is selected from an ester group, a ketal group, a
thioketal group, an acetal group and a tertiary alcohol group, and L represents
a polyvalent linking group comprising a non-metallic atom, which is necessary
for linking the structural unit which is represented by the general formula (2)
to a polymer skeleton, and whose decomposition accompanies the decomposition of
W.sup.1, which is decomposed by an acid, to generate sulfonic acid ;

CCXR:
430/270.1

Details Text Image KWIC

ee: Fuji Photo Film Co., Ltd.,
Minami-Ashigara, Japan

No.: 09/050,890

Mar. 31, 1998

oreign Application Priority Data

[JP] Japan 9-085328
[JP] Japan 9-089452
[JP] Japan 9-089816

..... G03F 7/004; G03F 7/09; G03C 1/72; G03C 1/77

..... 430/278.1; 430/270.1; 430/280.1; 430/283.1; 430/287.1; 430/944

f Search 430/270.1, 280.1, 430/287.1, 283.1, 944, 278.1, 914, 920, 921, 924, 925

References Cited

U.S. PATENT DOCUMENTS

4/1993 Aoai et al. 430/270.1

OREIGN PATENT DOCUMENTS

3/1989 European Pat. Off. .
8/1989 European Pat. Off. .

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Polysiloxane Formation at the Irradiated Surmers Containing Both Photoacid Generating y Units"—European Polymer Journal, vol. 33, 55–1262 (1997).

apanese Patent Application, Publication No. Yosahitaka, Apr. 2, 1988.

apanese Patent Application, Publication No. sugio, Oct. 23, 1988.

cts of Japan, vol. 013, No. 073, (P–830), Feb. P 63 257750A (Oji Paper Co. Ltd.), Oct. 25,

water-developed or can be used dire
a developing process. This objectiv
planographic original plate compr
photosensitive layer which is suppo
which contains a polymeric comp
chain at least one structural unit sel
units represented by the general fo
General Formula (1)

$$-SO_3-CH_2-_{l}-O-Z$$

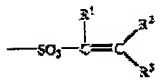
In the general formula (1), L rep
composed of a non-metallic atom
group which is decomposed by an
is 0 or 1.

General Formula (2)

$$-SO_3-L-W^1$$

In the general formula (2), W^1 repr
decomposed by an acid and selecte
ketal group, a thioketal group, an ac
alcohol group. L represents a po
comprising a non-metallic atom,
linking the structural unit which
general formula (2) to a polyme
decomposition accompanies the
which is decomposed by an acid, t

General Formula (3)



In the general formula (3), R^1 to
different, and each represents a

Details Text Image Full

EAST Browser - L59: (173) (44 AND (56... | US 6042987 A | Tag: S | Doc: 154/173 | Format : KWIC

File Edit View Tools Window Help

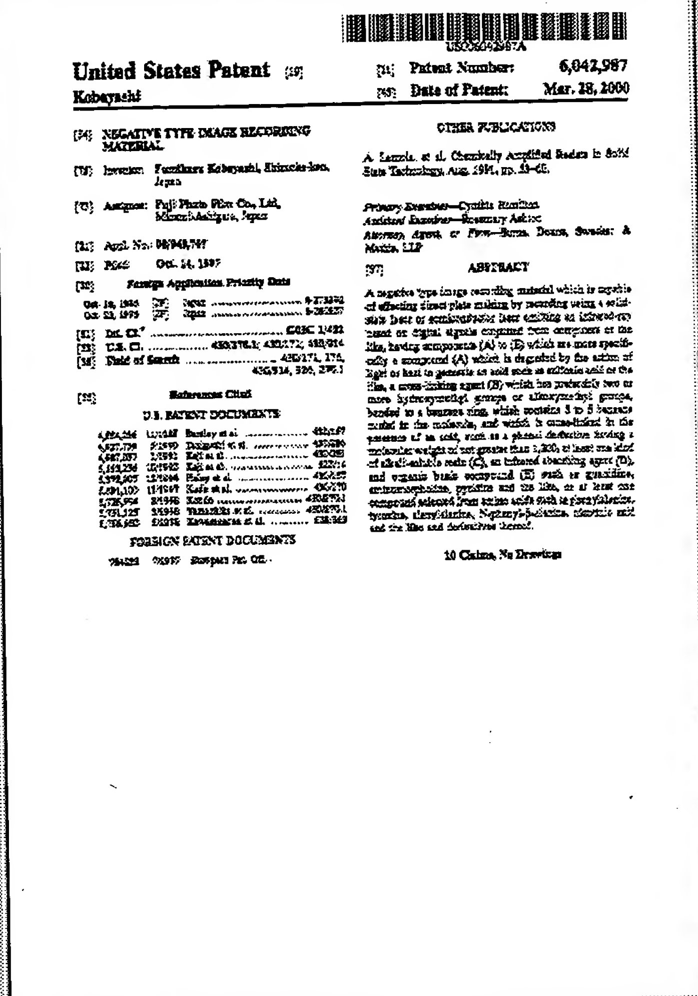
Courier New 10

DOCUMENT-IDENTIFIER: US 6042987 A
TITLE: Negative type image recording material

ABPL:
A negative type image recording material which is capable of effecting direct plate making by recording using a solid-state laser or semiconductor laser emitting an infrared-ray based on digital signals outputted from computers or the like, having components (A) to (E) which are more specifically a compound (A) which is degraded by the action of light or heat to generate an acid such as sulfonic acid or the like, a cross-linking agent (B) which has preferably two or more hydroxymethyl groups or alkoxymethyl groups, bonded to a benzene ring, which contains 3 to 5 benzene nuclei in the molecule, and which is cross-linked in the presence of an acid, such as a phenol derivative having a molecular weight of not greater than 1,200, at least one kind of alkali-soluble resin (C), an infrared absorbing agent (D), and organic basic compound (E) such as guanidine, aminomorpholine, pyridine and the like, or at least one compound selected from amino acids such as phenylalanine, tyrosine, alanylalanine, N-phenyl-.beta.-alanine, nicotinic acid and the like and derivatives thereof.

CCOR:
430/270.1

Details | Text | Image | KWIC


United States Patent [19]
Kobayashi
[11] Patent Number: 6,042,987
[45] Date of Patent: Mar. 28, 2000

[54] NEGATIVE TYPE IMAGE RECORDING MATERIAL

ABSTRACT

10 Claims, No Drawings

Details | Text | Image | Full

WEST

Freeform Search

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JPO Abstracts Database
EPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

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DB Name	Query	Hit Count	Set Name
USPT	l3 and l4	92	L6
USPT	l3 and l4	92	L5
USPT	photoresist or resist.ab.	48881	L4
USPT	l1 and l2	119	L3
USPT	generat$3 adj5 (sulfonic adj1 acid)	200	L2
USPT	compound adj10 generat$3	14896	L1

WEST

End of Result Set

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L2: Entry 2 of 2 File: DWPI Sep 25, 1998

DERWENT-ACC-NO: 1998-572567
DERWENT-WEEK: 200039

TITLE: Radiation sensitive resin composition processed using e.g. electron beam - comprising resin becoming acid soluble on cleaving acid gp., agent generating acid on irradiation and solvent

PRIORITY-DATA:
1997JP-0074717 March 12, 1997

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10254139 A	September 25, 1998	N/A	026	G03F007/039

INT-CL (IPC): G03F 7/004; G03F 7/039; H01L 21/027

ABSTRACTED-PUB-NO: JP 10254139A
BASIC-ABSTRACT:

A radiation sensitive resin composition includes (A) a resin composed of alkali insoluble or alkali slightly soluble acid cleavage gp-containing resin having an alicyclic structure in a main chain and/or a side chain, and becoming alkali soluble when the acid cleavage gp is cleaved, (B) a radiation sensitive acid generating agent generating acid by irradiation and (C) a solvent compose of a mixture of a straight chained ketone, and at least one kind of circular ketone, propylene glycol monoalkylether acetate, and alkyl 2-hydroxypropionic acid.

USE - Effectively used in the fine processing using far UV such as ArF excimer laser, X-ray such as synchrotron radiation, a charged particle beam such as electron beam, or the like.

ADVANTAGE - High transparency to radiation, dry etching resistance, uniform film thickness

WEST

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L2: Entry 1 of 2 File: JPAB Sep 25, 1998

PUB-NO: JP410254139A
DOCUMENT-IDENTIFIER: JP 10254139 A
TITLE: RADIATION SENSITIVE RESIN COMPOSITION

PUBN-DATE: September 25, 1998

INVENTOR-INFORMATION:
NAME
SUWA, MITSUFUMI
IWAZAWA, HARUO
KAJITA, TORU
IWANAGA, SHINICHIRO

INT-CL (IPC): G03F 7/039; G03F 7/004; G03F 7/004; H01L 21/027

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a resist pattern excellent in radiation transmitting property and dry etching resistance by incorporating a specified resin, a radiation sensitive acid producing agent and a solvent mixture of straight chain ketone with cyclic ketone, etc.

SOLUTION: This radiation sensitive resin compsn. contains an alkali-insoluble or slightly alkali-soluble resin having an alicyclic skeleton in the principal chain and/or a side chain, contg. acid-cleavable groups and convertible into an alkali-soluble resin when the groups are cleaved, a radiation sensitive acid generating agent that produces an acid when irradiated and a solvent mixture of straight chain ketone with at least one selected from among cyclic ketone, propylene glycol monoalkyl ether acetate and alkyl 2-hydroxypropionate. A resist pattern excellent in uniformity in film thickness, adhesiveness to the substrate, sensitivity, resolution, etc., can be formed.